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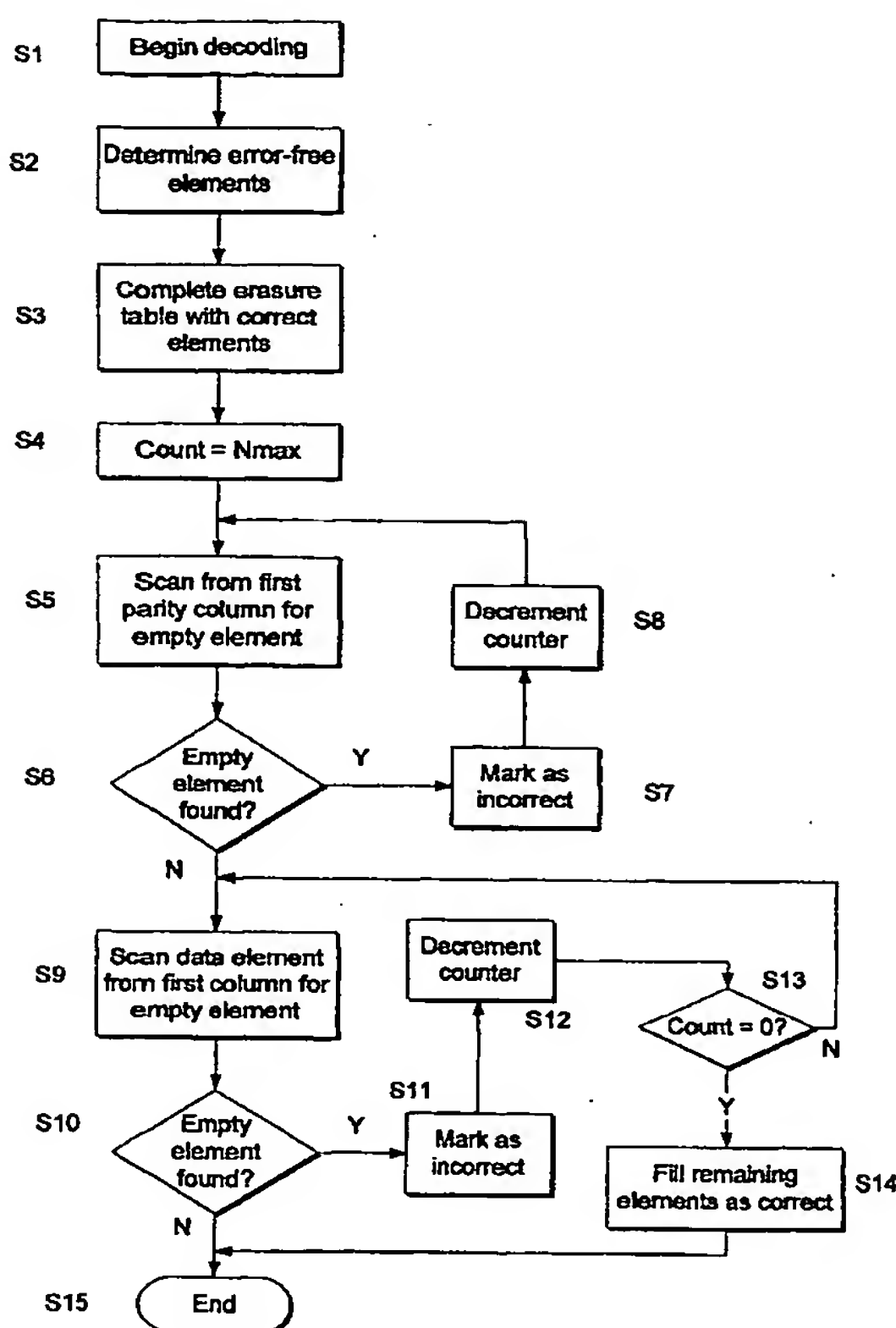
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(54) Title: FORWARD ERROR CORRECTION DECODERS



(57) Abstract: Elements of a coding table which are error-free are found at S2. At S3, corresponding elements in an erasure information table are completed, indicating that the elements in the coding array are correct. A counter is initialised at Nmax, which is the maximum number of errors that can be corrected, at S4. At S5, the row of the erasure information table is scanned beginning from the first parity column for empty elements. Each empty parity data element of the erasure information table row is marked as incorrect at S7. For each such element, the counter is decremented at S8. At S9, the elements of the erasure information table are scanned from the first column of the application data and zero padding section for empty elements. At step S11, an empty element is marked as incorrect. At step S12, the counter is then decremented. It is determined at step S13 whether or not the counter is equal to zero. When the counter becomes equal to zero, operation proceeds to step S14 where the decoder operates to fill remaining empty elements in the erasure information row as correct. Thus, whilst the count of incorrect elements for the row has not exceeded a maximum and whilst empty elements remain, empty elements of the erasure table row are marked as incorrect beginning with parity data elements and then continuing from the application data end.

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